



Reference: 001133.207

April 26, 2005

Mr. Daniel Warner
California Regional Water Quality Control Board
North Coast Region
5550 Skylane Blvd., Suite A
Santa Rosa, CA 95403

**Subject: First Quarter 2005 Groundwater Monitoring Report, Ukiah Hot Plant,
Ukiah, California; Case No. 1NMC545**

Introduction

Here is the First Quarter 2005 Groundwater Monitoring Report for the Ukiah Hot Plant, 4201 North State Street, Ukiah, Mendocino County, California. This report includes a brief discussion on the background of the site, vicinity information, a description of the work performed, and a summary of the results of the quarterly monitoring event. This work is being performed at the request of the California Regional Water Quality Control Board, North Coast Region (RWQCB).

Vicinity Information

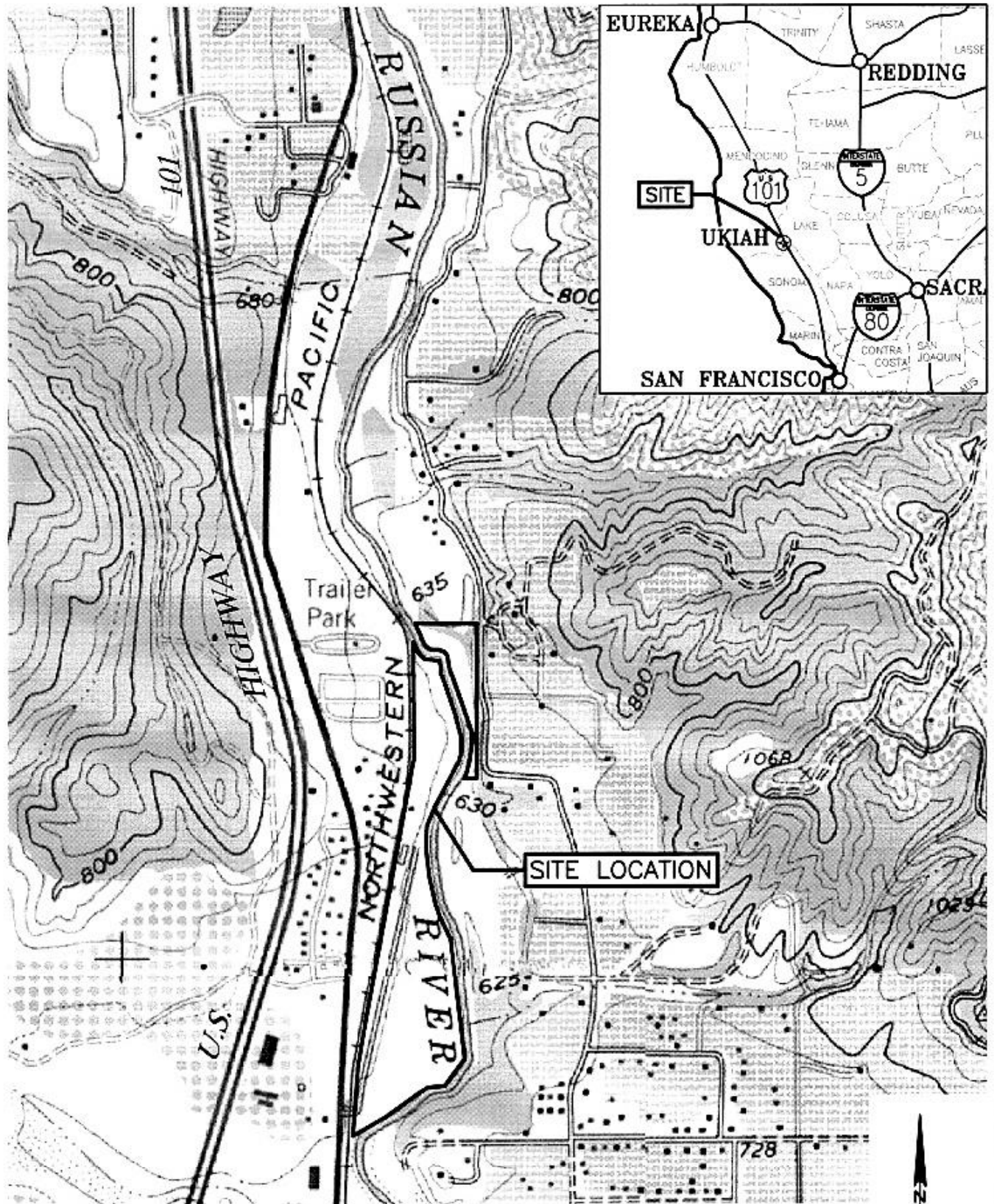
The Ukiah Hot Plant is located approximately 2 miles north of Ukiah, between the Russian River and State Highway 101 (Figure 1). The overall subject property encompasses in excess of 40 acres, of which the 4 southern parcels (APNs 167-260-05, 167-230-15 & 16, 167-190-24) are occupied by the asphalt batch and gravel processing plants, gravel stockpiles, and other support facilities (referred to in general as the "batch plant site"). The remaining 2 parcels (APNs 168-120-01 & 04) consist of approximately 3.8 acres of gravel bar and stream channel, located on the east side of the Russian River near the north end of the batch plant site.

The site is bound to the north, east, and south by the Russian River, and to the west by commercial/residential development located along North State Street. The elevation of the site is approximately 640 feet above Mean Sea Level (MSL).

Background

Granite Construction is the current owner and operator of the facility having purchased the facility from Parnum Paving. Prior to Parnum Paving, several different owners/operators have been at the facility over the past 40 years. The facility consists of sand and gravel aggregate operations, an asphalt drum-mix plant (hot plant), an equipment yard, and a maintenance shop. Facility operations include the stockpiling of gravel and rock material, crushing, washing, and sorting of the sand and aggregate used for general roadway construction, and for the incorporation of processed aggregate into asphalt concrete. The operations also include the fueling, maintenance, and storage of equipment used to transport and utilize the paving materials, as needed.

On July 9 through 11, 2001, SHN Consulting Engineers & Geologists, Inc. (SHN) supervised the installation of 28 soil borings and 50 test pits. Soil borings and test pit locations were selected by SHN or Granite Construction and then cleared by NORCAL Geophysical to minimize damage to existing underground utilities. Soil borings were drilled using a truck mounted Geoprobe® rig



SOURCE:
UKIAH USGS 7.5 MINUTE QUADRANGLE

1" = 1000' ±

SH
Consulting Engineers
& Geologists, Inc.

Granite Construction
Ukiah Hot Plant
Ukiah, California

Site Location Map

SHN 001133.207

January, 2005

001133.207-F1

Figure 1

operated by Fisch Environmental of Valley Springs, California. Borings were extended to a maximum depth of 23 feet Below Ground Surface (BGS). One hand-augered boring was advanced to 6 feet BGS behind the shop. Test pits were excavated using a backhoe or excavator and extended to a maximum depth of 11 feet BGS. Complete results of the investigation are presented in the report entitled *Environmental Site Assessment, Ukiah Hot Plant, Ukiah, California*. (SHN, 2003).

On March 8 and 9, 2004, SHN supervised Weeks Drilling of Sebastopol, California in the installation of three groundwater-monitoring wells in the vicinity of the hot plant (SHN, 2004).

Geology

Geology in the vicinity of the site consists of Quaternary Alluvium underlain by Plio-Pleistocene age alluvial and lacustrine deposits locally known as the Ukiah Beds. The Ukiah Beds are composed of low permeability materials consisting of moderately indurated beds of clayey and sandy gravels with subordinate amounts of clayey sands and sandy clays (NGI, 1987).

In general, sediments in the vicinity of the hot plant consist of varying thicknesses of gravelly fill with minor asphalt debris underlain by interbedded sandy gravels and fine to medium grained sands or silty sands. Depth to bedrock varied from approximately 15 feet to 17 feet BGS. The bedrock consists of moderately indurated olive green siltstone or claystone.

Field Activities

Monitoring Well Sampling

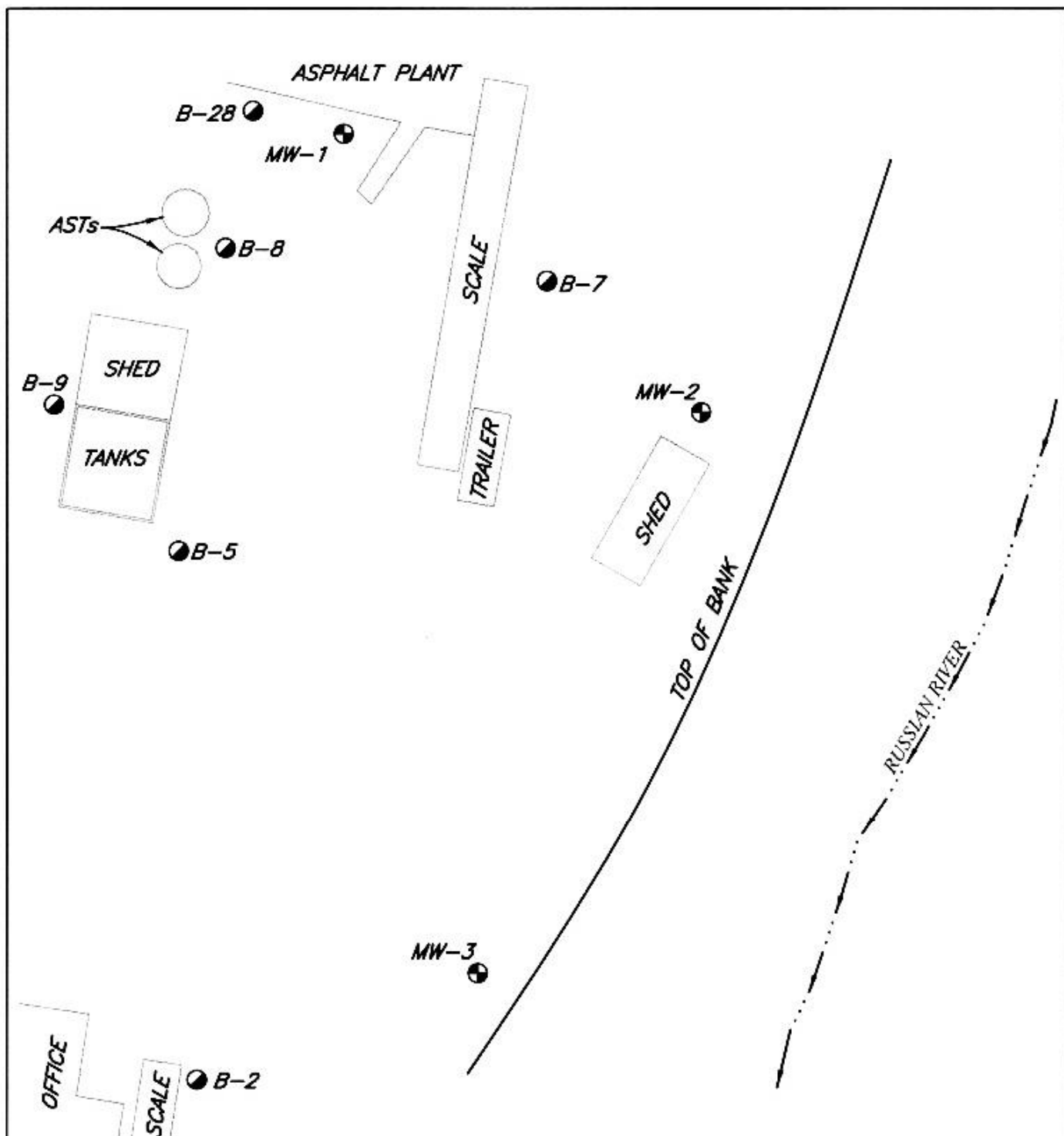
On March 25, 2005, SHN conducted quarterly groundwater monitoring of site monitoring wells (Figure 2). Prior to sample collection, each well was checked for free product (none was observed), and measured for depth to groundwater to the nearest 0.01 foot, utilizing an electronic water sensor. Approximately three casing volumes of water were purged from three monitoring wells using a disposable bailer. Electrical conductivity, pH, and temperature were monitored periodically during purging activities using portable instrumentation. Each groundwater well was also monitored for Dissolved Oxygen (DO), Oxidation-Reduction Potential (ORP), and Dissolved Carbon Dioxide (DCO₂).

Groundwater samples were collected from the three monitoring wells using disposable polyethylene bailers, and transferred into laboratory-supplied bottles. The water samples were then labeled, stored in an iced cooler, and transported to the analytical laboratory under proper chain-of-custody documentation. Groundwater monitoring data sheets are included in Attachment 1.

Laboratory Analysis

Each groundwater sample was analyzed for Total Petroleum Hydrocarbons as Motor Oil (TPHMO) and as Diesel (TPHD) in general accordance with United States Environmental Protection Agency (EPA) Method No. 8015M.

Groundwater samples were submitted to Alpha Analytical Laboratories Inc., of Ukiah, California.



EXPLANATION

- MONITORING WELL LOCATION
MW-1 AND DESIGNATION
- SOIL BORING LOCATION AND DESIGNATION
B-2 (2002 - LOCATION APPROXIMATE)



Consulting Engineers
& Geologists, Inc.

Granite Construction
Ukiah Hot Plant
Ukiah, California

Site Plan

SHN 001133.207

APRIL 2004

001133.207-SITE-SURVEY

Figure 2

Equipment Decontamination Procedures

All small equipment that required on-site cleaning was cleaned using the triple wash system. The equipment was first washed in a water solution containing Liquinox® cleaner, followed by a water rinse, then by a second distilled water rinse.

Investigation-Derived Waste Management

Water used in the decontamination of equipment, tools, and all purge water was contained in approved DOT 17 E/H, 55-gallon drums. The water was transported to SHN's purge water storage facility and will be discharged, under permit, to the City of Eureka wastewater collection system. A total of 24 gallons of water were generated during this monitoring event. A discharge receipt will be included in the next quarterly monitoring report. A discharge receipt for water generated during the previous monitoring event is included in Attachment 1.

Groundwater Monitoring Results

Hydrogeology

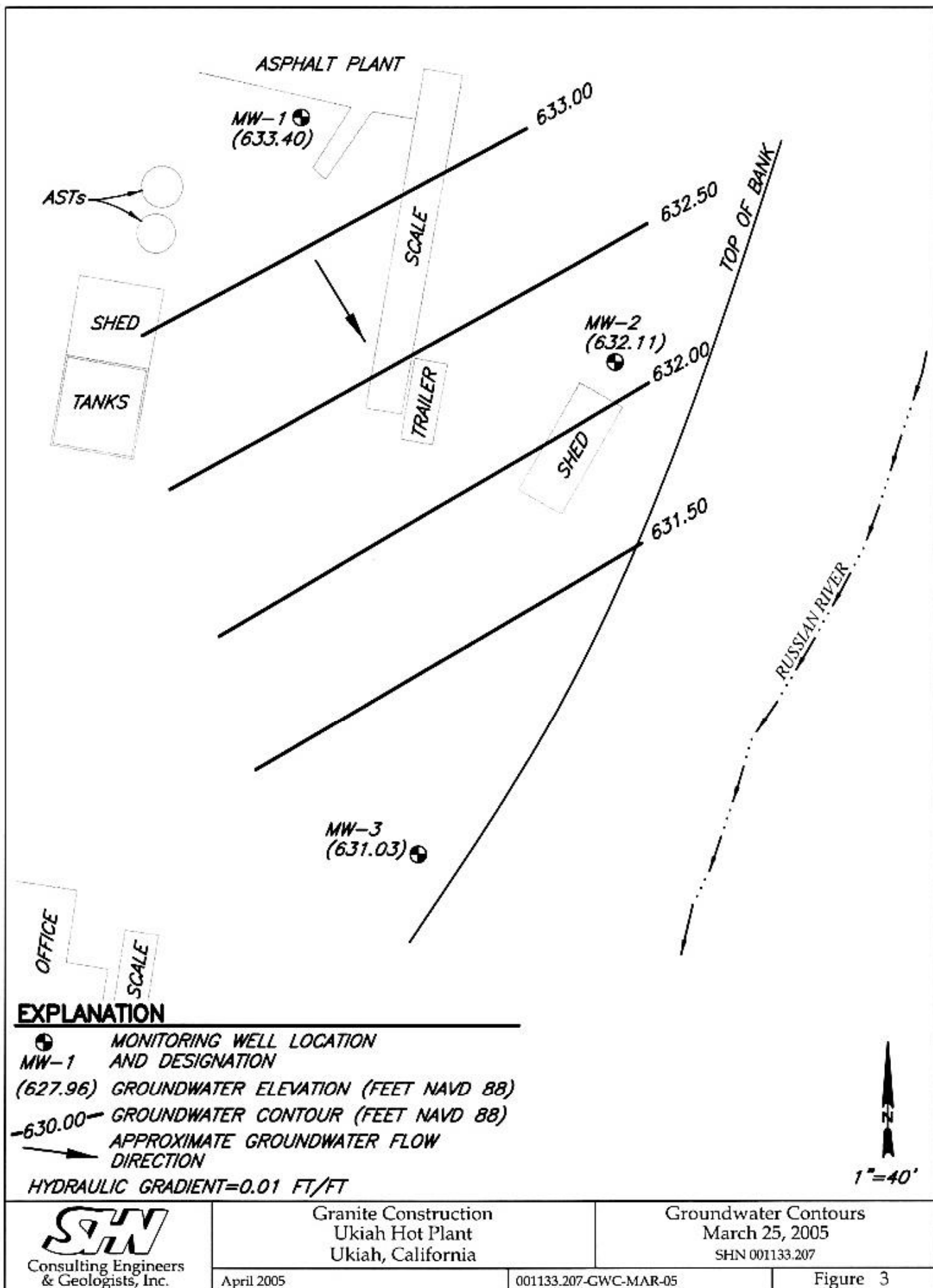
Depth to groundwater measurements were collected on March 25, 2005. The direction of groundwater flow on March 25, 2005 was to the south-southeast with an approximate gradient of 0.01 feet per foot (Figure 3). Groundwater elevations are presented in Table 1. Historic groundwater elevation data are included in Attachment 2.

Table 1 Groundwater Elevations, March 25, 2005 Ukiah Hot Plant, Ukiah, California			
Sample Location	Top of Casing Elevation (feet) ¹	Depth to Water (feet) ²	Groundwater Elevation (feet) ¹
MW-1	645.05	11.65	633.40
MW-2	642.56	10.45	632.11
MW-3	643.71	12.68	631.03
1. Referenced to NAVD88		2. Below top of casing	

Groundwater Analytical Results

Groundwater was sampled from each well on March 25, 2005. Analytical results are presented in Table 2 and Figure 4.

TPHD was detected in the groundwater samples from monitoring wells MW-1, MW-2, and MW-3. TPHMO was detected in the groundwater sample from MW-2. TPHMO was not detected in groundwater samples from monitoring wells MW-1 and MW-3. Historic groundwater analytical data are included in Attachment 2. The laboratory analytical reports are presented in Attachment 3.



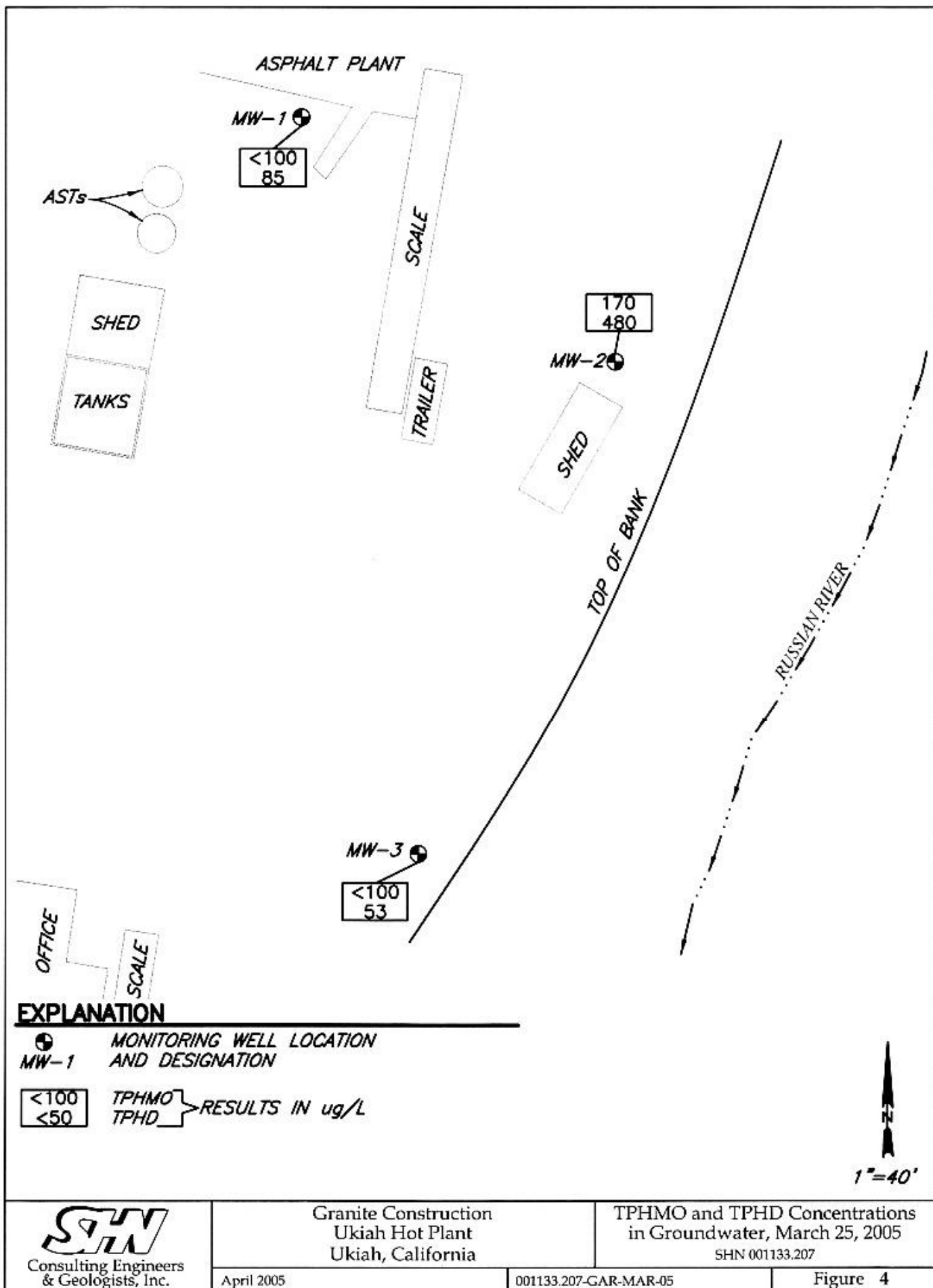


Table 2 Groundwater Analytical Results, March 25, 2005 Ukiah Hot Plant, Ukiah, California (in ug/L)¹		
Sample Location	TPHMO²	TPHD²
MW-1	<100³	85
MW-2	170	480
MW-3	<100	53
1. ug/L: micrograms per Liter 2. Total Petroleum Hydrocarbons as Motor Oil (TPHMO) and as Diesel (TPHD) analyzed in general accordance with EPA Method No. 8015M 3. <: Denotes a value that is "less than" the method detection limit.		

Natural Attenuation Parameters

DO, ORP, and DCO₂ were measured in the monitoring wells prior to sampling. Results are presented in Table 3. Historic DO, ORP, and DCO₂ measurement results are included in Attachment 2.

Table 3 DO, DCO₂, and ORP Measurement Results, March 25, 2005 Ukiah Hot Plant, Ukiah, California			
Sample Location	DO¹ (ppm)²	DCO₂³ (ppm)	ORP⁴ (mV)⁵
MW-1	0.20	46	68
MW-2	0.12	56	18
MW-3	0.12	42	76
1. DO: Dissolved Oxygen, field measured using a field test kit 2. ppm: Measurement concentration, in parts per million 3. DCO ₂ : Dissolved Carbon Dioxide, field measured using a field test kit 4. ORP: Oxidation-Reduction Potential measured using portable instrumentation 5. mV: millivolts			

Discussion and Recommendations

- TPHD was detected in each groundwater sample collected.
- A low concentration of TPHMO (170 ug/L) was detected in the groundwater sample from MW-2 during the March 2005 monitoring event.
- TPHMO was not detected in groundwater samples collected from monitoring wells MW-1 and MW-3.

SHN recommends three additional quarters of groundwater monitoring to confirm the decreasing trends in contaminant concentrations. Prior to groundwater sampling, wells will be checked for

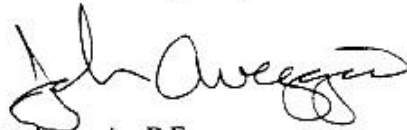
depth to water, and monitored for DO, DCO₂, and ORP. Wells will be purged of approximately three well casing volumes prior to sampling. During well purging, groundwater will be monitored for temperature, pH, and conductivity. Groundwater samples will be analyzed for TPHMO and TPHD.

SHN will complete and submit the next quarterly monitoring report, no later than 60 days following the quarterly sampling event. The letter report will include a description of the monitoring and sampling activities, a summary of results, analytical reports, groundwater elevations, and groundwater contour maps. An annual summary will also be included with the fourth quarter 2005 monitoring report. The next quarterly groundwater-monitoring event is scheduled for June 2005.

If you have any questions regarding the work completed, please call me at 707/441-8855.

Sincerely,

SHN Consulting Engineers & Geologists, Inc.



John Aveggio, P.E.
Project Manager



JJA/RMR:med

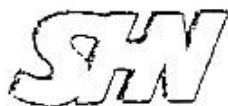
Attachments:

1. Field Notes
2. Historic Monitoring Data
3. Laboratory Analytical Reports

copy w/attach: Mr. Geoff Boraston, Granite Construction
Mr. Jordan Main, Granite Construction
Mendocino County Department of Environmental Health

References Cited

- NGI. (1987). *Geologic Investigation of the Existing York Ranch Wood Waste Disposal Facility Operated by Louisiana Pacific Corporation near Calpella, Mendocino County, California*. Eureka: NGI.
- SHN Consulting Engineers & Geologists, Inc. (2004). *Monitoring Well Installation and First Quarter 2004 Groundwater Monitoring Report, Ukiah Hot Plant, Ukiah, California; Case No. 1NMC545*. Eureka: SHN.
- . (2003). *Environmental Site Assessment, Ukiah Hot Plant, Ukiah, California*. Eureka: SHN.



CONSULTING ENGINEERS & GEOLOGISTS, INC.

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 512 W. Wabash • Eureka, CA 95501 • Tel: 707.441.8855 • FAX: 707.441.8877 • E-mail: shinfo@shn-engr.com

DAILY FIELD REPORT

JOB NO 00' 33.207

Page 1 of 1

PROJECT NAME GRANITE CONC. / ^{AKIAH} ^{NOT} ^{PLAIN}	CLIENT/OWNER GRANITE CONST.	DAILY FIELD REPORT SEQUENCE NO 1	
GENERAL LOCATION OF WORK UKIAH, CA	OWNER/CLIENT REPRESENTATIVE	DATE 3/25/05	DAY OF WEEK FRIDAY
TYPE OF WORK QUARTERLY SAMPLING	WEATHER 300- / CLEAR	PROJECT ENGINEER / SUPERVISOR JOHN AVULGIC / R. RUECK	
SOURCE & DESCRIPTION OF FILL MATERIAL	KEY PERSONS CONTACTED	TECHNICIAN TOD E. FURLEMAN	

DESCRIBE EQUIPMENT USED FOR HAULING, SPREADING, WATERING, CONDITIONING, & COMPACTING

- 1028 ARRIVED AT SITE, CHECKED IN W/ JORDAN, LIAISON LIAISON PHONE, THEN
 REMOVED LIDS & CAPS ON ALL 3 WELLS.
- 1045 STARTED TAKING WATER LEVELS DECONING THE SOUNDER AFTER EACH WELL
 BY SCRUBBING W/ LIGNINOX THEN RINSING WITH DE. WATER, DECON
 WATER WAS CAUGHT IN WASH TUB.
- 1115 STARTED TAKING D.C. READINGS
- 1217 STARTED PURGING MW-3 W/ DISP. BAILER, PURGE WATER WAS CAUGHT 3.1.2
 IN A GRADUATED 4 GALLON BUCKET & LATER STORED IN 55 G. DRUM (LABELED)
 FOR DAVE PAINE TO P/U.
- 1305 SAMPLED MW-3 W/ ITS BAILER, SECURED CAP & LID.
- 1320 STARTED PURGING MW-1 W/ DISP. BAILER, PURGE WATER CAUGHT IN GRAD. 4
 GALLON BUCKET.
- 1416 SAMPLED MW-1 W/ ITS DISP. BAILER, SECURED CAP & LID.
- 1435 BEGAN PURGING MW-2 W/ DISP. BAILER, PURGE WATER CAUGHT IN GRAD.
 4 GALLON BUCKET.
- 1504 SAMPLED MW-2 W/ ITS BAILER, SECURED CAP & LID.
- 1530 ALL PURGE WATER STORED IN LABELED 55 GALLON DRUM AND
 LEFT AT MW-3 FOR DAVE PAINE TO P/U.
- 1530 OFF SITE
- 1545 SAMPLES DROPPED OFF AT ALPHA ANALYTICAL FOR TESTING

NOTE: TEMP. (F.) SEEMED TO BE READING HIGH.

+ GEOTECH

FORM 001-010

REVISED BY



CONSULTING ENGINEERS & GEOLOGISTS, INC.

812 W. Wabash • Eureka, CA 95501-2138 • 707/441-8855 • FAX: 707/441-8877 • shninfo@shn-engr.com

Groundwater Elevations

[illegible]



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Water Sampling Data Sheet

Project Name: <u>GRANITE CONST. / UKIAH HOT PLANT</u>	Date/Time: <u>3/25/05</u>
Project No.: <u>001133.207</u>	Sampler Name: <u>TOO E. BURLESON</u>
Location: <u>UKIAH, CA.</u>	Sample Type: <u>GROUND WATER</u>
Well #: <u>MW-1</u>	Weather: <u>CLEAR / COOL</u>
Hydrocarbon Thickness/Depth (feet): _____	Key Needed: <u>YES - DELPHIN</u>

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
<u>19.37</u>	-	<u>11.65</u>	=	<u>7.72</u>	x	<u>.653</u>	=	<u>5.04</u>

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1130	.20 mg/L						0	
1327		46 mg/L	68				1.25	
1337				357	69.1	6.78	5.00	
1344				345	69.2	6.82	10.00	
1358	NO FLOW			217	71.1	6.83	15.00	
1416	THRU CELL							
1416								SAMPLED MW-1

Purge Method: HAND BAIL

Total Volume Removed: 15.00 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses

Well Condition: GOOD

Remarks _____



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Water Sampling Data Sheet

Project Name: <u>GRANITE CONST. / UKIAH HOT PLANT</u>	Date/Time: <u>3-25-05</u>
Project No.: <u>001133.207</u>	Sampler Name: <u>TOD E. BURLISON</u>
Location: <u>UKIAH, CA</u>	Sample Type: <u>GROUND WATER</u>
Well #: <u>MW-2</u>	Weather: <u>CLEAR 1200L</u>
Hydrocarbon Thickness/Depth (feet): <u>NA</u>	Key Needed: <u>YES - DOLPHIN</u>

Total Well Depth (feet)	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
<u>18.74</u>	<u>10.45</u>	=	<u>8.29</u>	x	<u>.163</u>	=	<u>1.35</u>

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1144	12 mg/L	50 mg/L					0	
1445		56 mg/L	18				.25	
1454				367	67.1	6.67	1.25	
1458				373	65.4	6.68	2.50	
1504				374	65.7	6.68	3.75	
	NO FLOW							
	THRU CELL							
1510								
				SAMPLED	MW-2			

Purge Method: HAND BA -

Total Volume Removed: 3.75 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses

Well Condition: GOOD

Remarks:



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Water Sampling Data Sheet

Project Name: <u>GRANITE COVSI / UKIAH HOT PLANT</u>	Date/Time: <u>3-24-05</u>
Project No.: <u>001133.207</u>	Sampler Name: <u>TOD E. BURLIN</u>
Location: <u>UKIAH, CA</u>	Sample Type: <u>GROUND WATER</u>
Well #: <u>MW-3</u>	Weather: <u>COOL / CLEAR</u>
Hydrocarbon Thickness/Depth (feet): _____	Key Needed: <u>YES, DOWN</u>

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
<u>20.32</u>	-	<u>12.06</u>	=	<u>7.64</u>	x	<u>0.163</u>	=	<u>1.25</u>

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1204	0.12 mg/L						0	
1221		42 mg/L	76	342 uS		6.29	0.25	
1232				342 uS	67.3 F	6.29	1.25	
1245				291 uS	68.3	6.56	2.75	
1255	NO FLOW			347	69.1	6.64	4.00	
1258	THRU CELL			345	69.1	6.61	5.25	
1304			SAMPLE	TIME				

Purge Method: HAND BAILERTotal Volume Removed: 5.25 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses

Well Condition: GOOD

Remarks: _____

Client Name: **GRANITE CONSTRUCTION HOT PLANT**

The water from your site:

**4201 NORTH STATE STREET
UKIAH, CA RWQCB CASE # 1NMC545**

SHN ref # **001133.207**

Collected On: **12/21/04**

Has been tested and certified as acceptable to be discharged into the City of Eureka municipal sewer system.

Amount Discharged: **21 GALLONS**

Date Discharged: **1/24/05**

Certified by: **DAVID R. PAINE**

SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.
City of Eureka Wastewater Discharge Permit #65

Table 2-1 Historic Groundwater Elevations Ukiah Hot Plant, Ukiah, California				
Location	Date	Top of Casing Elevation (feet)¹	Depth to Water² (feet)	Groundwater Elevation (feet)¹
MW-1	03/22/04	645.05	13.28	631.77
	06/21/04		14.85	630.20
	09/08/04		14.69	630.36
	12/21/04		13.79	631.26
	03/25/05		11.65	633.40
MW-2	03/22/04	642.56	11.77	630.79
	06/21/04		12.77	629.79
	09/08/04		12.44	630.12
	12/21/04		11.53	631.03
	03/25/05		10.45	632.11
MW-3	03/22/04	643.71	13.71	630.00
	06/21/04		15.81	627.90
	09/08/04		15.75	627.96
	12/21/04		14.08	629.63
	03/25/05		12.68	631.03
1. Referenced to NAVD88			2. Below top of casing	

Table 2-2
Historic Groundwater Analytical Results
Ukiah Hot Plant, Ukiah, California
(in ug/L)¹

Sample Location	Date	TPHMO ²	TPHD ²
MW-1	03/23/04	<100 ³	110
	06/21/04	<100	<50
	09/08/04	<100	<50
	12/21/04	<100	<50
	03/25/05	<100	85
MW-2	03/22/04	730	2,000
	06/21/04	1,500	3,000
	09/08/04	210	470
	12/21/04	<100	80
	03/25/05	170	480
MW-3	03/22/04	110	<50
	06/21/04	<100	<50
	09/08/04	<100	<50
	12/21/04	<100	<50
	03/25/05	<100	53

1. ug/L: micrograms per Liter

2. Total Petroleum Hydrocarbons as Motor Oil (TPHMO) and as Diesel (TPHD) analyzed in general accordance with EPA Method No. 8015M

3. <: Denotes a laboratory value that is "less than" the method detection limit.

Table 2-3 Historic DO, DCO₂, and ORP Measurement Results Ukiah Hot Plant, Ukiah, California				
Sample Location	Date	DO¹ (ppm)²	DCO₂³ (ppm)	ORP⁴ (mV)⁵
MW-1	03/23/04	0.58	20	243
	06/21/04	0.82	40	139
	09/08/04	0.66	40	51
	12/21/04	2.02	40	63
	03/25/05	0.20	46	68
MW-2	03/22/04	0.58	40	248
	06/21/04	0.64	40	80
	09/08/04	0.61	60	-16
	12/21/04	0.90	40	22
	03/25/05	0.12	56	18
MW-3	03/22/04	0.60	20	236
	06/21/04	0.64	60	153
	09/08/04	0.71	70	114
	12/21/04	1.03	40	89
	03/25/05	0.12	42	76
1. DO: Dissolved Oxygen, field measured using portable instrumentation or a field test kit 2. ppm: Measurement concentration, in parts per million 3. DCO ₂ : Dissolved Carbon Dioxide, field measured using a field test kit 4. ORP: Oxidation-Reduction Potential measured using portable instrumentation 5. mV: millivolts				



alpha

Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

07 April 2005

SHN Engineering

Attn: John Aveggio

812 W. Wabash Ave

Eureka, CA 95501-2138

RE: Granite - #001133.204

Work Order: A503731

Enclosed are the results of analyses for samples received by the laboratory on 03/25/05 16:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nena M. Burgess For Sheri L. Speaks
Project Manager



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

CHEMICAL EXAMINATION REPORT

Page 1 of 5

SHN Engineering
812 W. Wabash Ave
Eureka, CA 95501-2138
Attn: John Aveggio

Report Date: 04/07/05 14:41
Project No: 001133.204
Project ID: Granite - #001133.204

Order Number
A503731

Receipt Date/Time
03/25/2005 16:00

Client Code
SHNEUR

Client PO/Reference

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	A503731-01	Water	03/25/05 14:16	03/25/05 16:00
MW-2	A503731-02	Water	03/25/05 15:04	03/25/05 16:00
MW-3	A503731-03	Water	03/25/05 13:05	03/25/05 16:00

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Nena M. Burgess For Sheri L. Speaks
Project Manager

4/7/2005



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

CHEMICAL EXAMINATION REPORT

Page 2 of 5

SHN Engineering
812 W. Wabash Ave
Eureka, CA 95501-2138
Attn: John Aveggio

Report Date: 04/07/05 14:41
Project No: 001133.204
Project ID: Granite - #001133.204

Order Number
A503731

Receipt Date/Time
03/25/2005 16:00


Client Code
SHNEUR

Client PO/Reference

Alpha Analytical Laboratories, Inc.

	METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE
MW-1 (A503731-01)			Sample Type: Water			Sampled: 03/25/05 14:16		
TPH by EPA/LUFT GC/GCMS Methods								
TPH as Diesel	8015DRO	AC53018	03/30/05	03/31/05	1	85 ug/l	50	
TPH as Motor Oil	"	"	"	"	"	ND "	100	
Surrogate: 1,4-Bromofluorobenzene						68.7 %	20-152	
MW-2 (A503731-02)			Sample Type: Water			Sampled: 03/25/05 15:04		
TPH by EPA/LUFT GC/GCMS Methods								
TPH as Diesel	8015DRO	AC55018	03/30/05	03/31/05	1	480 ug/l	50	
TPH as Motor Oil	"	"	"	"	"	170 "	100	
Surrogate: 1,4-Bromofluorobenzene						66.3 %	20-152	
MW-3 (A503731-03)			Sample Type: Water			Sampled: 03/25/05 13:05		
TPH by EPA/LUFT GC/GCMS Methods								
TPH as Diesel	8015DRO	AC53114	03/31/05	03/31/05	1	53 ug/l	50	D-03
TPH as Motor Oil	"	"	"	"	"	ND "	100	
Surrogate: 1,4-Bromofluorobenzene						81.3 %	20-152	

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Nena M. Burgess For Sheri L. Speaks
Project Manager

4/7/2005



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208 Mason Street, Ukiah, California 95482

CHEMICAL EXAMINATION REPORT

Page 3 of 5

SHN Engineering
812 W. Wabash Ave
Eureka, CA 95501-2138
Attn: John Aveggio

Report Date: 04/07/05 14:41
Project No: 001133.204
Project ID: Granite - #001133.204

Order Number
A503731

Receipt Date/Time
03/25/2005 16:00

Client Code
SHNEUR

Client PO/Reference

TPH by EPA/LUFT GC/GCMS Methods - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC53018 - EPA 3510B Water										
Blank (AC53018-BLK1)				Prepared & Analyzed: 03/30/05						
TPH as Diesel	ND	50	ug/l							
TPH as Motor Oil	ND	100	"							
Surrogate: 1,4-Dibromofluorobenzene	427		"	579		73.7	20-152			
LCS (AC53018-BS1)				Prepared & Analyzed: 03/30/05						
TPH as Diesel	2080	50	ug/l	1960		106	52-136			
TPH as Motor Oil	2130	100	"	1990		107	58-138			
Surrogate: 1,4-Dibromofluorobenzene	456		"	579		78.8	20-152			
LCS Dup (AC53018-BSD1)				Prepared & Analyzed: 03/30/05						
TPH as Diesel	2130	50	ug/l	1960		109	52-136	2.38	25	
TPH as Motor Oil	2140	100	"	1990		108	58-138	0.468	25	
Surrogate: 1,4-Dibromofluorobenzene	474		"	579		81.9	20-152			
Batch AC53114 - EPA 3510B Water										
Blank (AC53114-BLK1)				Prepared & Analyzed: 03/31/05						
TPH as Diesel	ND	50	ug/l							
TPH as Motor Oil	ND	100	"							
Surrogate: 1,4-Dibromofluorobenzene	396		"	579		68.4	20-152			
LCS (AC53114-BS1)				Prepared & Analyzed: 03/31/05						
TPH as Diesel	2070	50	ug/l	1960		106	52-136			
TPH as Motor Oil	2050	100	"	1990		103	58-138			
Surrogate: 1,4-Dibromofluorobenzene	480		"	579		82.9	20-152			
LCS Dup (AC53114-BSD1)				Prepared & Analyzed: 03/31/05						

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Nena M. Burgess For Sheri L. Speaks
Project Manager

4/7/2005



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CHEMICAL EXAMINATION REPORT

Page 4 of 5

SHN Engineering
812 W. Wabash Ave
Eureka, CA 95501-2138
Attn: John Aveggio

Report Date: 04/07/05 14:41
Project No: 001133.204
Project ID: Granite - #001133.204

Order Number
AS03731

Receipt Date/Time
03/25/2005 16:00

Client Code
SHNEUR

Client PO/Reference

TPH by EPA/LUFT GC/GCMS Methods - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC53114 - EPA 3510B Water										
LCS Dup (AC53114-BSD1)				Prepared & Analyzed 03/31/05						
TPH as Diesel	2090	50	ug/l	1960		107	52-136	0.962	25	
TPH as Motor Oil	2050	100	"	1990		103	58-138	0.00	25	
Surrogate: 1,4-Dibromofluorobenzene	483		"	579		83.4	20-152			

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Project Manager

4/7/2005



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CHEMICAL EXAMINATION REPORT

Page 5 of 5

SHN Engineering
812 W. Wabash Ave
Eureka, CA 95501-2138
Attn: John Aveggio

Report Date: 04/07/05 14:41
Project No: 001133.204
Project ID: Granite - #001133.204

Order Number
A503731

Receipt Date/Time
03/25/2005 16:00

Client Code
SHNEUR

Client PO/Reference

Notes and Definitions

ID-03 The result for this hydrocarbon is elevated due to the presence of a single analyte peak(s) in the quantitation range

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

PQL Practical Quantitation Limit



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WORK ORDER CHAIN OF CUSTODY RECORD

DATE 3-25-05 PAGE 1 OF 1

CLIENT'S NAME SHN		PROJECT MANAGER JOHN AVEGALLO		ANALYSES		SAMPLE CONDITION ON RECEIPT (1-4)	
STREET ADDRESS 812 W. WABASH AVE. BUREKA CA 95501		CITY BUREKA CA		STATE CA		ZIP 95501	
PROJECT NAME GRAVITE CONST. / AKIAH HOT PLANT		PHONE NUMBER (707) 441-8855		FAX NUMBER (707) 441-8877		COLD/DICED? N/A	
CONTRACT/PURCHASE ORDER/QUOTE NUMBER		SITE CONTACT		BUBBLES OR AIR SPACE?		WERE SAMPLES PRESERVED?	
SIGNATURE OF PERSON AUTHORIZING WORK UNDER TERMS STATED ON REVERSE SIDE OF THIS FORM		SAMPLED BY JOE E. BUREKA		EXPLAIN IRREGULARITIES BELOW			
SAMPLE NUMBER/IDENTIFICATION		DATE		TIME		LAB SAMPLE NUMBER	
MW-1		3/25/05		1410		ASD 3731	
MW-2		1504		1504		2 X	
MW-3		1305		1305		3 X	
RECEIVED BY: (SIGNATURE)		RECEIVED BY: (SIGNATURE)		RECEIVED BY: (SIGNATURE)		RECEIVED BY: (SIGNATURE)	
RECEIVED BY: (SIGNATURE)		RECEIVED BY: (SIGNATURE)		RECEIVED BY: (SIGNATURE)		RECEIVED BY: (SIGNATURE)	
RECEIVED BY: (SIGNATURE)		RECEIVED BY: (SIGNATURE)		RECEIVED BY: (SIGNATURE)		RECEIVED BY: (SIGNATURE)	
METHOD OF SHIPMENT		AUTHORIZED BY		SAMPLE CONTROL OFFICER		SAMPLE DEPOSITION	
SPECIAL INSTRUCTIONS		TOTAL TIME		SITE TIME		TURN AROUND TIME REQUESTED	
DRAWING TIME		TOTAL TIME		SITE TIME		TURN AROUND TIME REQUESTED	

1. STORAGE TIME REQUESTED _____ DAYS
2. SAMPLES WILL BE STORED FOR 30 DAYS WITHOUT ADDITIONAL CHARGES.
3. THEREAFTER STORAGE CHARGES WILL BE BILLED AT THE PUBLISHED RATES.
4. SAMPLE TO BE RETURNED TO CLIENT? ☐ YES ☐ NO
5. HAZARDOUS MATERIALS ARE THE PROPERTY OF THE CLIENT. THE CLIENT IS RESPONSIBLE FOR PROPER DISPOSAL OF HAZARDOUS WASTES. CLIENTS NOT PICKING UP HAZARDOUS WASTES MAY BE ASSESSED AN APPROPRIATE FEE.